# Montana Natural Heritage Program User Survey: Summary & Analysis

November, 2008

This survey was conducted between July 16 and September 16, 2008. Invitations were emailed to 789 individuals who were registered as users of our Tracker web application and/or had made data requests to MTNHP in the past two years. A link to the survey was also posted on the MTNHP website from mid-June through mid-September.

### Who responded to the survey?

- > Total respondents: 336
  - 320 were registered Tracker users or data requestors who were sent an email invitation (response rate = 41% -- very high for a survey of any type!)
  - 16 responded to the invitation/link on the NHP website
- Survey *completion* rate was 85% (also very high)
- ➤ The largest number of responses came from the US Forest Service (76) and Montana Fish, Wildlife & Parks (58). Along with the BLM (30), these three agencies accounted for nearly 50% of all respondents.
- > Private individuals were tied with BLM as the third largest group, with 30 respondents.
- > Federal agencies accounted for about 40% of respondents, and state agencies for 30%.
- > The private sector (individuals, non-profits & businesses) accounted for 21% of respondents.

Note: Categories with very few respondents relative to the size of the group are not included in our detailed analysis of responses, due to unrepresentative sample sizes. These groups include University/Higher Ed, Local Governments, and Tribal Governments, reminding us that we have much work to do among these groups to promote NHP resources and increase usership.

Those respondents selecting "Other" as a category identified their affiliations as:

- Bureau of Reclamation
- National Park Service (2)
- US Geological Survey (2)
- US Air Force
- High School science teacher
- Montana Spiders Project (private research)
- Other state heritage programs: Oregon, Massachusetts, New Mexico
- State and local Audubon chapters in Montana (2)
- Cornell Lab of Ornithology

# **How do you use MTNHP products & services?**

➤ Top uses overall: Environmental Reviews/Assessments

Species/Habitat Management

➤ Second most frequent uses: Land Management

Conservation Planning

Research

- Monitoring runs close behind these, and is among the top 4 uses for BLM and USFS
- > Conservation Planning is rated very high by USFWS, NRCS, MFWP and Non-profits.
- > Permitting is a top use for DEQ, MDT and Private business, but relatively low for others.
- ➤ *Remediation/restoration* is among the top 3 uses for MDT.
- Non-profits report very diverse use patters, led by *Conservation Planning*, but also including *Research, Monitoring & Noxious Weed management*.
- ➤ Private businesses also have highly diverse uses (including all uses listed), topped by *Environmental Reviews and Permitting*.
- > Research ranks highest for University/Higher Ed respondents.
- ➤ Private Individuals selected all uses except *Permitting*, with the emphasis being on *Recreation* and *Education*.

"Other Uses" identified by respondents included:

- Bird distribution, birdwatching information & reports (7)
- Wetland mapping
- Water information
- Mussel information
- Personal interest (3)
- Grant development
- Conservation easement baselines

## **Frequency of Use**

- ➤ Most users are monthly (31%) or quarterly (26%).
- ➤ 16% are daily or weekly users.
- $\triangleright$  BLM 70% are weekly or monthly users
- ➤ MDT most are weekly users
- ➤ USFS only 30% are weekly or monthly users, 60% quarterly or rarely
- ➤ NRCS, DNRC, DEQ most are monthly users
- ➤ MFWP 53% are monthly or quarterly users, 12% weekly and 30% rarely
- ➤ Non-profits report a full spread of usership, with 31% daily or weekly, 32% monthly, and 36% quarterly or rarely.

# If your answer is Rarely or Never, please tell us why...

- Limited need or lack of need (e.g., due to type of work) (15-20 responses)
- Difficulty using the web applications (10-15)
- Intermittently as need arises (10)
- Lack of time (6)
- Manager whose staff use the data (5)
- Changed jobs or moved out of state (5)
- Previously unaware but plan on using it (4)
- Another source meets their needs (NatureServe or their own agency database 4)
- Use previously downloaded datasets (3)
- Unfamiliarity (3)
- Don't use the internet much (1)
- No information for primary geographic areas of interest (1)

#### Trends in Use

- ➤ 38% of respondents report some or substantial increase in use over in the past two years
- > 52% report no change
- > 9% report decrease (comments indicate many of the latter have changed jobs or moved out of state)
- ➤ More respondents from BLM, NRCS and Non-profits reported increased use: 57% for BLM, 52% for NRCS, and 47% for Non-profits.
- ➤ Two of our biggest agency partners, USFS and FWP, reported among the lowest increases in use: 24% for USFS and 31% for FWP, suggesting that more communication and training may be needed.
- ➤ Private individuals reported a substantial increase in use (46%) as well as a significant decreased in use (25%).

#### If your use has Decreased, please tell us why...

- Changed jobs (10 responses)
- Difficulty using web applications (6)
- Same as answer to last question (7)
- Most interested in game or lower-priority (for MTNHP) species (2)
- Fewer projects or applications that require NHP data (2)
- Just discovered the data (3)

# **How are MTNHP Services Rated by Users?**

- ➤ Over 90% of respondents rated all NHP services as good or outstanding.
- ➤ The highest ratings went to **Staff Expertise** (67% Outstanding, 33% good) and **Staff Responsiveness** (69% Outstanding, 31% good).
- ➤ The lowest relative ratings were for **Completeness of Information**, which 35% rated Outstanding, 56% Good and 9% Needs Improvement.

Note: satisfaction ratings were generally slightly lower from the biggest user groups (BLM, USFS), with the exception of ratings for staff expertise and responsiveness.

# **How Usable are MTNHP Web Services?**

- Most web services were rated Easy to Use or OK with Effort.
- ➤ The Field Guide was judged most "Easy to Use" at 74%.
- ➤ 40-50% of respondents reported Tracker, Ecology Info, and Publications Easy to Use, and 37% said Tracker was OK with effort.
- ➤ Overall, Tracker was reported as Easy to Use or OK with Effort by 81% of all respondents, and by 100% of NRCS and MDT respondents.
- ➤ Only 3% reported Tracker Too Difficult, however another 16% reported that they did not use it, which may reflect some level of difficulty in using it or getting started.
- Submit an Observation was judged as most challenging to use: 17% of respondents reported it Easy to Use, and 24% OK with Effort. Although only 4% reported it Too Difficult, another 53% report not using it, which again may reflect some degree of challenge.
- Surprisingly, Private Individuals gave the most positive ratings for Submit an Observation, with 75% of respondents reporting it Easy to Use or OK with Effort (evenly divided), none reporting it Too Difficult, and less than 30% reporting that they Don't Use it.
- ➤ Services with the lowest reported usage levels were the Aquatic Ecosystems Guide at 64% and Help Files at 71%. The apparent reluctance of folks to use the Help Files poses a special challenge in helping users take advantage of these complex but powerful applications.

### Do you have any suggestions for improving our web services?

#### Most frequent responses include:

- Make Tracker more user-friendly, especially entry of observation data
- ➤ Make Tracker compatible with other web browsers
- ➤ Keep it simple to use
- ➤ Increase awareness of what's available
- ➤ Include mapped data on non-game and invasive species
- > Improve ability to print maps
- Improve "evidence of breeding" definitions and options for entering observations
- ➤ Allow moving or deleting observation point if entered in error
- ➤ Make all reports available in PDF format

#### Other suggestions from individual respondents:

- ➤ Make it easier to find community descriptions
- > Bring more GIS layers and priority conservation layers from other sources into NHP site
- More prompt updating of agency status ranks (or dropped species)
- Access to individual bird sightings for QLL as was available in MBD database
- ➤ Ability to generate lists of observed and potential species for selected location
- > Expand aquatic ecosystem guide to statewide coverage
- ➤ More training in how to use new services or features
- > Include counts with the bird data in Tracker

- > Improve Tracker response speed
- More help matching type of request to the best app/steps in answering it
- ➤ Make it quicker to find species in Field Guide
- Increase integration of data with FWP (and NRIS, others) for truly one-stop web access

### Several respondents were satisfied and had no suggestions for improvements; examples:

"No; keep up all the quality work that you do!"

"Overall, I think the service provided is outstanding!"

"I don't have any specific suggestions for improving services. I appreciate being able to submit queries for EO and POD data for specific geographic areas. I find it useful to be able to view the data in GIS rather than just work with a list of species."

"I think your services are great! We need to work to continue to bring all our USFS, BLM, FWP, etc. observation data to the NH Tracker site so we can share our knowledge."

# **Relative Importance of NHP Products & Services**

- ➤ Two-thirds (8 of 12) of NHP Products and Services were rated Essential or Very Useful by a majority of respondents.
- ➤ Highest-rated were: Species of Concern Web Searches, Species of Concern Ranks-Lists, and Species of Concern Requests-Reviews, which 75%-84% of respondents reported as Essential or Very Useful.
- ➤ A large majority of respondents of four agencies rated Species of Concern Request-Reviews as Essential: DNRC (85%), DEQ (100%), MDT (83%), and NRCS (75%).
- ➤ Lowest rated products/services were three types of Ecological information: Aquatic, Plant Community and Wetland. This reflects that these datasets are extremely incomplete at this time. Also, due to their incompleteness, we also haven't focused on developing web tools for searching and viewing them. However, these datasets are currently three of our highest priorities and areas of most intensive staff effort and partner investment.
- ➤ MDT respondents noted the largest number of NHP products & services as Essential.

## **Priorities for New/Expanded Products & Services**

➤ **All** of the potential new or expanded products/services identified were ranked Very or Somewhat Valuable by a majority of respondents (even the lowest, at 67%).

*Highest Priorities*: (50% or more respondents identified as Very Valuable)

- > Statewide Land Cover Maps
- > Wetland & Riparian Maps
- ➤ More Management Information on Species & Ecosystems
- ➤ Detailed land Cover Maps for Selected Areas & Cover Types
- ➤ Monitoring of Priority Species and Habitats
- ➤ Predictive Species Distribution Maps

Others Priorities: (85% or more identified as Very or Somewhat Valuable):

- > Status Ranks for all Ecosystem Types
- ➤ Quality Assessment Criteria for Ecosystems
- Descriptions & Field Data for Areas Surveyed
- ➤ More info on Invasive Species/Weeds

Only two were rated "Least Valuable" by more than 20% of respondents: (although more than 65% of respondents still identified these as Very or Somewhat Valuable)

- > Field trainings
- > Training in use of Web Services (as with Help Files, this poses a special challenge in assisting users to take advantage of our highly valued services!)

Variations in new information priorities among major user groups:

Variations in new information priorities among major user groups:		
User Group	Additional "Highest Priorities"	Additional "Other Priorities"
BLM	<ul> <li>Crosswalk of Ecosystem Classifications</li> <li>Descriptions &amp; Field Data for Areas Surveyed</li> <li>Field Trainings</li> <li>Web Access to SOC's by Section.</li> </ul>	
USFS		<ul> <li>Crosswalk of Ecological Classifications</li> <li>Aquatic Ecosystems &amp; Species</li> <li>Invertebrate information</li> <li>Field Trainings</li> <li>Web Access to SOC's by Section</li> </ul>
USFWS	<ul> <li>Crosswalk of Ecosystem Classifications</li> <li>Descriptions &amp; Field Data for Areas Surveyed</li> </ul>	<ul><li>Aquatic Ecosystems &amp; Species</li><li>Invertebrate information</li><li>Field Trainings</li></ul>
NRCS	Info on Invasive Species/Weeds	
FWP		
DNRC		Web Access to SOC's by Section
DEQ	<ul> <li>Crosswalk of Ecosystem         Classifications</li> <li>Ecosystem Status Ranks</li> <li>Quality Assessment Criteria for         Ecosystems</li> </ul>	<ul> <li>Aquatic Ecosystems &amp; Species</li> <li>Web Access to SOC by Section</li> </ul>
MDT	Info on Invasive Species/Weeds	<ul><li>Field Trainings</li><li>Web Access to SOC by Section</li></ul>
Non-Profits	Info on Invasive Species/Weeds	Crosswalk of Ecological Classifications
Businesses	<ul> <li>Descriptions &amp; Field Data for Areas Surveyed</li> <li>Info on Invasive Species/Weeds</li> <li>Web Access to SOC by Section</li> </ul>	<ul> <li>Crosswalk of Ecological Classifications</li> <li>Aquatic Ecosystems &amp; Species</li> <li>Invertebrate information</li> <li>Field Trainings</li> </ul>
Private Individuals	<ul> <li>Descriptions &amp; Field Data for Areas Surveyed</li> <li>Field Trainings</li> <li>Web Access to SOC by Section</li> </ul>	<ul> <li>Aquatic Ecosystems &amp; Species</li> <li>Invertebrate information</li> </ul>

# Are there other types of data or services you would like provided or expanded?

Responses included:

- ➤ Make it possible to view data from NHP via IMS link so it can be seen on Federal ArcMap web-based applications. (from BLM)
- > Expand the Field Guide to include more species and provide more information; link with FWP on some wildlife information.
- > Enter more data into the databases.
- ➤ Uploadable GPS maps of everything from land ownership to habitat types to land cover, species sightings, wetlands, hunting districts. There are easy ways to make custom maps for Garmin GPS users…this could prove valuable for field crews and managers.
- More photos of common species, esp. bats & insects.
- Reduce the delay between data submission and its addition to the website.
- > TES and species of concern by section rather than by township would be very useful.
- ➤ Work with FWP on critical linkage zones for high profile species.
- ➤ No additional suggestions (10 responses).

## How do you prefer to learn about new or changed MTNHP products & services?

- A majority of all respondents (52%) prefer to receive Emails notices whenever new services or products become available. Electronic newsletters once or twice a year are the first choice for 41% of respondents or second-choice for 51% of respondents.
- ➤ A Printed Annual Newsletter was the third choice for 54% of respondents, and No Communication was the last choice of 62% of respondents.
- ➤ The only exceptions to these preferences was USFWS respondents, who preferred receiving an Electronic Newsletter as their first choice (67%), and Email Notices as the second choice (58%).

# Please tell us how MTNHP data & services have helped your work or organization.

- ➤ Over half of all respondents reported Great Benefit of MTNHP data & services in improving Efficiency, Accuracy, Decision-Making, Resource Management/Conservation, and Products/Services to their Customers/Public.
- ➤ "Cost-Savings" was the only exception to the above: 34% of respondents identified Great Benefit, 42% reported Some Benefit, and 24% reported No Benefit. This difference appears largely related to the fact that most respondents were public agency staff, for whom cost savings are probably not as readily evident. In contrast, 58% of Private Business respondents reported Great Benefit from Cost Savings, as did 44% of NGO respondents.

BLM: Highest numbers of respondents reported Great Benefits in Better Decision-Making (78%), Improved Resource Management/Conservation (78%) and Improved Products/Services to the Public (76%). 100% of BLM respondents reported some or great benefit in terms of Improved Efficiency, Better Decision-Making and Improved Products/Services.

NRCS: Highest numbers of respondents reported Great Benefits in Improved Efficiency (67%), Improved Accuracy (75%), and Improved Resource Management/Conservation (67%). 100% of NRCS respondents reported some or great benefit in terms of Greater Efficiency, Improved Accuracy, and Improved Resource Management/Conservation.

USFS: Greatest reported benefits were for Improved Accuracy (58%). Over 50% also reported Some Benefit for Greater Efficiency, Cost-Savings, Improved Resource Management/Conservation and Improved Products/Services.

FWP: Greatest reported benefits were for Better Decision-Making (50%) and Improved Resource Management/Conservation (50%), Improved Accuracy (49%), and Improved Products/Services (49%).

DNRC: Greatest reported benefits were for Better Decision-Making (71%), Greater Efficiency (62%), Cost-Savings ((54%), and Improved Resource Management/ Conservation (57%). 100% of DNRC respondents reported some or great benefit in Better Decision-Making.

USFWS: 100% of respondents reported some or great benefits in term so of Improved Efficiency, Improved Accuracy, and Improved Products/Services.

DEQ: Highest numbers of respondents reported Great Benefits in Better Decision-Making (75%) and Improved Products/Services (88%). 100% of DEQ respondents reported some or great benefit in Better Decision-Making, Improved Resource Management/Conservation and Improved Products/Services.

MDT: 100% of respondents reported Great Benefit in Greater Efficiency, and 83% in Improved Accuracy. 100% of MDT respondents reported some or great benefit in *all categories* (including cost-savings).

Non-Profits: Highest numbers of respondents reported Great Benefits in Greater Efficiency (69%), Better Decision-Making (69%) and Improved Products/Services (60%). NGO respondents also registered the highest percentages for "No Benefit," ranging from 12-20% across the categories.

Private Business: Respondents reported Great Benefits in Greater Efficiency (68%), Improved Products/Services to Customers (74%), Better Decision-Making (63%) and Improved Accuracy (53%).

Private Individuals: Greatest Benefits were reported in Improved Resource Management (64%), Improved Accuracy (58%), Greater Efficiency (55%), Better Decision-Making (55%), and Improved Products/Services.

## Are there other ways that MTNHP Products/Services help you?

Sample responses:

"I put the on-line MTNHP site info into the local Audubon Chapter Newsletter. I am often asked about species occurrences in our area; the site is very good at answering those questions."

"I'm into consistency and accuracy – takes some of the guesswork out of assessing impacts and provides a source of similar information that can be sued by biologists and viewed by private citizens in environmental documents."

"Importantly, NHP serves as the ultimate 'ground zero.' IT is where all the data should go and NHP sets or takes the lead in data standards for Natural Resource Management."

- "Any data that we may provide to the public, and a site that we may direct them to so as to assist in their education or knowledge, I believe, is invaluable. THANKS."
- "Improved my knowledge of Montana's environment."
- "Often I rely on MNHP data to determine species presence in an area especially when I don't have the time or resources to investigate."
- "Using the web based MNHP data provides transparency to environmental analysis."
- "I think the Forest Service soil and water community could develop much stronger links with MTNHP. Issues surrounding climate change and increased incidence of drought and floods, increased fire, life zones moving upslope and north, all will have large effects on hydrology and other resources. There will almost surely be a role for the HP data bases in assisting with monitoring and assessment of those changes."

## Is there anything else you'd like to tell us?

Sample responses:

- "All of your products have been a great benefit to our organization; keep up the good work!"
- "Appreciate your service to the conservation community."
- "Appreciate all the good work!"
- "Awesome staff have been beneficial to helping me learn how to obtain and interpret the Species of Concern reports. Thanks so much!"
- "Great job guys. Keep up the good work."
- "Great job, you have a talented and responsive staff!"
- "I appreciate the information available and I think that it would get greater use if workshops on how to use the web sites were provided in each of the college towns in Montana."
- "I enter all my bird sightings into a commercial database (Birder's Diary). If I have to re-enter every sighting for Ebird AND MTNHP I'll never be in the field again. IF all systems could be mutually compatible so I could enter sightings only once and then simply import or export them to the other systems EVERYONE would benefit."
- "I suggest you offer training at the Regional Training Academy (RTA) held annually in Missoula."
- "I've never used your work or program, but greatly support your efforts!"
- "In comparison with other state heritage programs, I have always been impressed with the service and availability (and transparency) of MTNHP."
- "It is a great service to the public, especially all your on-the-ground data collection."
- "Keep doing what you're doing, as long as you don't get stretched too thin!"
- "Keep up the good work! We really appreciate the data and services that you provide!"

"Love the website, keep adding info."

"MTNHP continues to be a flagship program in the Heritage netw9ork – the web producdts are just one example. Keep u p the good work!"

"Please get the Tracker site up and easier to use!"

"Please work so that there is a better exchange of data between our Natinoal Database (NRIS Wildlife, Invasives – USFS) and the NHP databases. Only need to enter info in once place one time!"

"Thank you for all you're doing! It's a wonderful set of services that you have designed, and I look forward to the expanded products. The wetlands/riparian area mapping will be especially valuable."

"Thanks for all you do!"

"Thanks for providing this wonderful, comprehensive resource!"

"Thanks for sending the survey...it reminded me to take a look at the program site and I suspect I will use it more not that I've looked around."

"Thanks for your excellent data site. I work across several states and MT has one of the best if not THE best."

"Your website is a good start but I don't see how it is useful for on-the-ground natural resource management. How is the site intended to be used?"

"The GIS map that comes with the TES and Species of Concern report can be difficult to follow. IT seems like many polygons that don't apply to the search area are included on the map. I'd like to see a color coded legend that includes the species referenced in the report."

"The MTNHP is a great resource. I haven't used the site much, but I recall it being very user-friendly to beginning users. I was able to get the information I needed quickly. I really appreciate the relatively open-access to the information; not all states have the information as easy for potential data users to access."

"The site is user-friendly...even for me!"

"This is a Herculean effort and I applaud your work!"

"This is the best website I've seen to date."

"We appreciate most one on one contact with folks like Bryce Maxell and Dave Stagliano; they've been excellent resources for us!"

"You guys rock! Thank you so much for your outstanding efforts."

"YOU ALL do a great job with what you are tasked with. I commend all of you, and thank even those departments that I seldom use or access."

"You do an outstanding job!"

"You guys rock. Thanks for all the hard work and the awesome tool you are creating."